CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/MEW/W.No.12/CSR-06/360j/CEMENT/2017-18 Date: 14.06.2017

TEST REPORT ON CEMENT

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
* Agency	:	**M/s. Mahendra Engineering Works,** (Prop. G. Venkatesh), No. 243, 15th D Cross, 2nd Stage, 2nd Phase, West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of Work	:	Maintenance of UGD at Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	AEE/SSD/PR/94/2017-18 Dated: 12.06.2017
* Sample ID	:	Cement
Sample Received on	:	12.06.2017
Period of Testing	:	12.06.2017 to 14.06.2017

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4) 1988 (RA-2014)	29.50 %	-
2	a) Initial Setting Time	IS-4031 (Part -5) 1988 (RA-2014)	175 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) 1988 (RA-2014)	480 Minutes	Not More than 600 Minutes
3	Soundness by Le Chartlier Method	IS-4031 (Part-3) 1988 (RA-2014)	1 mm	Not more than 10mm

*Information is furnished by the Customer/Representative.

AE-12

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

****

VIDYARANI P.K.
Technical Manager

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/MEW/W.No.12/CSR-06/360j/SAND-Gradation/2017-18 14.06.2017

TEST REPORT ON SIEVE ANALYSIS OF FINE AGGREGATES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
* Agency	:	**M/s. Mahendra Engineering Works, (Prop. G. Venkatesh),** No. 243, 15th D Cross, 2nd Stage, 2nd Phase, West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of Work	:	Maintenance of UGD at Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	AEE/SSD/PR/94/2017-18 Dated: 12.06.2017
* Sample ID	:	Fine Aggregates
Technical Reference	:	IS : 2386 (Part 1) - 1963 (RA-2011)
Sample Received On	:	12.06.2017
Date of Testing	:	14.06.2017

Total Wt. of Aggregates in gms = **1000**

IS Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2011)			
		Zone-I	Zone-II	Zone-III	Zone-IV
10	100	100	100	100	100
4.75	93.80	90-100	90-100	90-100	95-100
2.36	76.80	60-95	75-100	85-100	95-100
1.18	51.30	30-70	55-90	75-100	90-100
600 Micron	21.30	15-34	35-59	60-79	80-100
300 Micron	12.70	5-20	8-30	12-40	15-50
150 Micron	3.30	0-10	0-10	0-10	0-15

* Information is furnished by the Customer/Representative

Remarks : This sample is under Zone-I specific limits.

Civil-Tech Consultants & Engineers Bangalore

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

VIDYARANI P.K.
Technical Manager

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/MEW/W.No.12/CSR-06/360j/AGG/GR/2017-18

14.06.2017

TEST REPORT ON SIEVE ANALYSIS OF COARSE AGGREGATES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
* Agency	:	**M/s. Mahendra Engineering Works, (Prop. G. Venkatesh),** No. 243, 15th D Cross, 2nd Stage, 2nd Phase, West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of Work	:	Maintenance of UGD at Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	AEE/SSD/PR/94/2017-18 Dated: 12.06.2017
* Sample ID	:	Coarse Aggregates (40mm)
Technical Reference	:	IS : 2386 (Part 1) -1963 (RA-2011)
Sample Received on	:	12.06.2017
Date of Testing	:	14.06.2017

Total Wt. of Aggregates in gms= **5000**

IS Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2011)	
		Graded	Single Sized
80	100	100	-
63	100	-	100
40	97.20	95-100	85-100
20	36.84	30-70	0-20
10	16.20	10-35	0-5
4.75	1.18	0-5	-

Information is furnished by the Customer/Representative

Remarks : This sample is under graded specific limits.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

VIDYARANI P.K.
Technical Manager

****

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

Job No.: CTCE /BBMP /MEW/W.No.12/CSR-06/360/AGG/GR/2017-18

14.06.2017

TEST REPORT ON SIEVE ANALYSIS OF COARSE AGGREGATES

* Customer	:	Asst. Executive Engineer, Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
* Agency	:	M/s. Mahendra Engineering Works, (Prop. G. Venkatesh), No. 243, 15th D Cross, 2nd Stage, 2nd Phase, West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of Sub Work	:	Maintenance of UGD at Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	AEE/SSD/PR/94/2017-18 Dated: 12.06.2017
* Sample ID	:	Coarse Aggregates (20mm)
Technical Reference	:	IS : 2386 (Part 1) -1963(RA-2011)
Sample Received on	:	12.06.2017
Date of Testing	:	14.06.2017

Total Wt. of Aggregates in gms= 5000

IS Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS :383-1970 (RA- 2011)	
		Graded	Single Sized
40	100	100	100
20	97.16	95-100	85-100
10	34.62	25-55	0-20
4.75	5.54	0-10	0-5

* Information is furnished by the Customer/Representative

Remarks : This sample is under Graded specific limits

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

AE-12

****

VIDYARANI P.K.
Technical Manager

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/MEW/W.No.12/CSR-06/360j/Bricks/2017-18 17.06.2017

TEST REPORT ON WATER ABSORPTION OF BRICKS

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
* Agency	:	**M/s. Mahendra Engineering Works, (Prop. G. Venkatesh),** No. 243, 15th D Cross, 2nd Stage, 2nd Phase, West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of the work	:	Maintenance of UGD at Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	AEE/SSD/PR/94/2017-18 Dated: 12.06.2017
* Sample ID	:	Bricks
Technical Reference	:	IS: 3495(Part-2)- 1992 (RA-2011)
Sample Received on	:	12.06.2017
Date of Testing	:	17.06.2017

Sl.No	Size of Bricks in mm	Dry weight in gms	Wet weight in gms	Water Abosorption in %	Average Water Absorption in %	Allowable Water absorption as per IS: 1077:1995 Clause 7.2)
1	220x100x75	2968	3298	11.12	11.69	Not exceeding 20%
2	220x100x75	2965	3312	11.70		
3	220x100x75	2957	3289	11.23		
4	220x100x75	2972	3324	11.84		
5	220x100x75	2969	3342	12.56		

* Information is furnished by the Customer/Representative

Civil-Tech Consultants & Engineers Bangalore

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

VIDYARANI P.K.
Technical Manager

****

AE-12

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಮಹಾಲಂ. ರಸ್ತೆ, ಬೆಂಗಳೂರು-56.

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory
An ISO 9001:2008 Certified Company
NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/MEW/W.No.12/SWGPipe/2017-18

17.06.2017

TEST REPORT ON GLAZED STONEWARE PIPE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
* Agency	:	**M/s. Mahendra Engineering Works, (Prop. G. Venkatesh),** No. 243, 15th D Cross, 2nd Stage, 2nd Phase, West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of work	:	Maintenance of UGD at Ward No. 12, Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	AEE/SSD/PR/94/2017-18 Dated: 12.06.2017
* Sample ID	:	Glazed Stoneware Pipe (300mm dia) SP-1 Class
Techinical Reference	:	As Per IS-651:2007 (VI revision)
Date of Testing	:	17.06.2017

Sl No	Internal Diameter	Thickness of Pipe	% absorption	% of Acid Resistance	Crushing Strength kN/m
1	300mm	25mm	6.3	1.85	17.65
2	300mm	25mm	6.5	1.95	17.90
3	300mm	25mm	6.7	1.98	18.25
Requirements as per IS-651:2007(VI Revision)	-----	----	Maximum 7%	Not Exceed 2.5%	Minimum 16kN/m

*Information is furnished by the Customer/Representative.

Civil-Tech Consultants & Engineers Bangalore

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

AE-12

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ವಲಯ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಶಕ್ತಿ ಗಣಪತಿನಗರ ಪಾಲಕೆ
ಬಿಬಿಎಂಪಿ, ಬೆಂಗಳೂರು.

****

Civil-tech Consultants & Enginee
#23/14, 7th Cross 3rd Stage 4th Block
Shakthi Ganapathinagar,
Basaveshwaranagar, Bangalore-560 07

Scanned by CamScanner